Status Report of the Ukrainian IGS Stations

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As of the end of 2001 there are five permanent GPS stations in Ukraine (Figure 1), four of which contribute data to the IGS.

Figure 1. Ukrainian Permanent GPS Stations

Kiev/Golosiiv

Kiev/Golosiiv (4–char ID: GLSV), the first Ukrainian permanent GPS station, operates since December 16, 1997. It is located at the Main Astronomical Observatory of the National Academy of Sciences of Ukraine (MAO) in the Golosiiv Wood, the southern part of the city of Kiev. The antenna is placed at the top of steel pillar mounted on the roof of the Observatory office.

Station Configuration	
Station name:	Kiev/Golosiiv
4-char ID:	GLSV
DOMES Number:	12356M001
Receiver type:	Trimble 4000SSI
Firmware version:	TRM29659.00
Antenna height:	0.0000 m
Antenna reference point:	BPA
Clock:	Internal
Approximate coordinates (WGS–84):	
Latitude:	50.3642 N
Longitude:	30.4967 E
Height:	226.8 m
Managing Software:	ggps (bash script developed at the MAO, uses r–utilities (Trimble Navigation Ltd.), teqc, and RNX2CRX/CRX2RNX)
Data Flow:	Daily Compact RINEX observation and navigation files are sent to the Regional Data Center at the BKG (Frankfurt am Main, Germany)
Collocation:	SLR 1824 Kiev

Uzhgorod

The Uzhgorod station (4–char ID: UZHL) started the observations on February 5, 1999. This station is situated at the Space Research Laboratory of the Uzhgorod National University, city of Uzhgorod. Like GLSV it is operated by the MAO. The antenna is located at the top of steel pillar mounted on the roof of the Laboratory office.

Station Configuration	
Station name:	Uzhgorod
4-char ID:	UZHL
DOMES Number:	12301M001
Receiver type:	Trimble 4000SSI
Firmware version:	7.19A (since 25–APR–2000)
Antenna type:	TRM29659.00
Antenna height:	0.0000 m
Antenna reference point:	BPA
Clock:	Internal
Approximate coordinates (WGS–84):	
Latitude:	48.6320 N
Longitude:	22.2976 E
Height:	232.0 m
Managing Software:	ggps

Data	Flow:Daily Compact RINEX observation and navigation files are sent to the Regional Data Center in the BKG (Frankfurt am Main, Germany). Raw data are sent to the MAO archive.

Poltava

The new station Poltava (4–char ID) started observations April 26, 2001. It is operated by the Science and Research Institute of Geodesy and Cartography (RIGC) and situated at the Poltava Gravimetric Observatory of the National Academy of Sciences of Ukraine, city of Poltava. The choke ring antenna is installed at the top of steel pillar mounted on the roof of the main Observatory office.

Station Configuration	
Station name:	Poltava
4-char ID:	POLV
DOMES Number:	12336M001
Receiver type:	TRIMBLE 4700
Firmware version:	1.30
Antenna type:	TRM29659.00
Antenna height:	0.0000 m
Antenna reference point:	BPA
Clock:	Internal
Approximate coordinates (WGS–84):	
Latitude:	49.6026 N
Longitude:	34.5429 E
Height:	178.1 m
Managing Software:	Trimble Reference Station
Data Flow:	Daily RINEX observation and navigation files are sent to the MAO, where data are translated to the Compact RINEX format and headers of the observation files are prepared following the IGS requirements. Then data are sent to the Regional Data Center in the BKG (Frankfurt am Main, Germany).

Lviv

The observations at the new station Lviv (4–char ID: SULP) were started on June 10, 2001. The station is located in the National University "Lviv Polytechnic" (NULP), city of Lviv. It is operated by the NULP in cooperation with the RIGC. The Zephyr antenna is placed on metallic construction over the fundamental astronomical monument, which was constructed and built on rock base in 1870 inside the main building of the University in such a manner to have no any contact with the building itself. In 1996–2000 SULP took part in CERGOP and CERGOP–2 campaigns as an epoch station.

Station Configuration		
Station name:	Lviv	
4-char ID:	SULP	
DOMES Number:	12366M001	
Receiver type:	TRIMBLE 4700	
Firmware version:	1.30	
	Till 13–OCT–2001	Since 13–OCT–2001
Antenna type:	TRM33429.20+GP	TRM41249.00
Antenna height:	4.7340 m	4.7295 m
Antenna reference point:	BPA	BPA
Clock:	Internal	
Approximate coordinates (WGS–84):		
Latitude:	49.8356 N	
Longitude:	24.0145 E	
Height:	370.5 m	
Managing Software:	Trimble Reference Station	
Data Flow:	Hourly and daily RINEX observation and navigation files are transferred from on-site PC (WinNT) to another PC (UNIX), where data are translated to the Compact RINEX format and headers of the observation files are prepared following the IGS requirements. Then data are sent to the EPN Local Data Center in the Space Research Institute, Department of Satellite Geodesy, Austrian Academy of Sciences (OLG, Austria)	
Collocation:	SLR 1831 Lviv	

CRAO

The fifth Ukrainian permanent GPS station CRAO, installed by Massachusetts Institute of Technology and included in the UNAVCO Mediterranean GPS Network, operates since April 27, 2000. It is located in the Simeiz Station of the Crimean Astrophysical Observatory, Simeiz, Crimea. The station is equipped with the Rogue SNR–8000 receiver (firmware version: 3.2.32.8) and the AOAD/M_T antenna with the SCIS dome. The hourly and daily RINEX observation and navigation files are available at the UNAVCO ftp server.